AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A transgenic caprine whose genome comprises an exogenous nucleic acid encoding at least one transgenic polypeptide, said nucleic acid operably linked to a salivary gland-specific cis-acting 5' transcription control region, wherein said control region comprises a bovine salivary gland protein promoter selected from the group consisting of bSP30a and bSP30b.

2-5. (Canceled)

6. (Previously Presented) The caprine of Claim 1, wherein said polypeptide comprises an active form.

7. (Previously Presented) The caprine of Claim 1, wherein said polypeptide comprises a proactive form.

8. (Previously Presented) The caprine of Claim 1, wherein said transgenic polypeptide is human.

9. (Previously Presented) The caprine of Claim 1, wherein said transgenic polypeptide is produced at a level of 5.0 mg/ml.

10. (Previously Presented) The caprine of Claim 8, wherein said human transgenic polypeptide is selected from the group consisting of phytase, an antibody, a growth hormone, a blood protein, serum albumin, fibrinogen, prothrombin, thrombin and von Willebrand Factor ("vWF").

11. (Previously Presented) The caprine of Claim 1, wherein said transgenic polypeptide comprises a specific activity relative to that of the naturally occurring polypeptide.

12. (Previously Presented) The caprine of Claim 1, wherein said transgenic polypeptide comprises a specific activity ranging from 25% to 95% relative to that of the naturally occurring peptide.

13. (Previously Presented) The caprine of Claim 7, wherein said proactive form is converted into said active form.

14. (Canceled)

15. (Previously Presented) The caprine of Claim 1, wherein said salivary gland-specific expression construct gland cell transgene comprises a parotid gland cell expression construct transgene.

16. (Previously Presented) The caprine of Claim 1, wherein said mammal further comprises a flexible tubing inserted into at least one salivary gland pair, wherein said pair comprises a first and second salivary gland.

17. (Previously Presented) The caprine of Claim 16, wherein said salivary gland comprises a parotid gland pair.

18. (Previously Presented) The caprine of Claim 16, wherein said flexible tubing is inserted into said first salivary gland.

19. (Previously Presented) The caprine of Claim 1, wherein said transgenic polypeptide is selected from the group consisting of phytase, an antibody, a growth hormone, a blood protein, serum albumin, fibrinogen, prothrombin, thrombin and von Willebrand Factor ("vWF").

20. (Currently Amended) A method, comprising:

a) providing;

i) a transgenic caprine whose genome comprises an exogenous nucleic acid encoding at least one transgenic polypeptide, said nucleic acid operably linked to a salivary gland-specific cis-acting 5' transcriptional control region, wherein said control region comprises a bovine salivary gland protein promoter selected from the group consisting of bSP30a and bSP30b, said caprine capable of producing saliva, wherein said polypeptide is produced in said saliva and is collected from a salivary gland duct;

ii) a flexible tubing to collect said saliva;

b) making a surgical incision in said salivary gland duct; and

c) cannulating said duct with said tubing.

21. (Original) The method of Claim 20, further comprising step (d) collecting said saliva in a collection device.

22. (Canceled)

23. (Previously Presented) The method of Claim 21, further comprising the step of isolating said polypeptide from said saliva.

24-26. (Canceled)

27. (Previously Presented) The method of Claim 20, wherein said transgenic polypeptide is human.

28. (Original) The method of Claim 27, wherein said human transgenic polypeptide is selected from the group consisting of phytase, an antibody, a growth hormone, a blood protein, serum albumin, fibrinogen, prothrombin, thrombin and von Willebrand Factor ("vWF").

29. (Currently Amended) A method, comprising:

a) providing;
   i) a first DNA sequence comprising 5' cis-acting expression signals, said first DNA sequence being derived from a first salivary gland secretory protein gene, said first gene comprising a bovine salivary gland protein promoter selected from the group consisting of bSP30a and bSP30b;
   ii) a second DNA sequence encoding a polypeptide of interest and a region encoding an operable secretion signal, said secretion signal being derived from a second salivary gland secretory protein gene;
   iii) a third DNA sequence comprising termination and 3' regulatory signals, said third DNA sequence being derived from a third salivary gland secretory protein gene, wherein said first, second, and third salivary gland secretory protein genes are not necessarily different;
b) joining said first, second, third DNA sequences in operable linkage effective for salivary gland expression and saliva-specific expression of said polypeptide of interest to create a transgene construct;
c) cloning said transgene construct to produce a vector;
d) microinjecting said vector into a caprine embryo to produce a transgenic caprine whose genome comprises a transgenic polypeptide transgene

capable of engendering expression of said polypeptide in saliva of said caprine.

30-32. (Canceled)

33. (Original) The method of Claim 29, wherein said transgenic polypeptide is human.

34. (Original) The method of Claim 33, wherein said human transgenic polypeptide is selected from the group consisting of phytase, an antibody, a growth hormone, a blood protein, serum albumin, fibrinogen, prothrombin, thrombin and von Willebrand Factor ("vWF").

35-62. (Canceled)